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Calgary and Saskatchewan HTS protocols were found to be costly compared to LTS with the Calgary protocol being the most costly. The Saskatchewan protocol was found to be less costly than the Calgary protocol primarily due to employing ultrasound as the initial confirmatory diagnostic which reduces the number of Hysterosalpingogram (HSG) procedures conducted compared to the Calgary protocol. However, while HTS is more costly than LTS, it was also more effective. The costs saved per successful procedure lost by switching from LTS to the Saskatchewan protocol or the Calgary protocol was $3,588 and $4,789, respectively. This result suggests that the Saskatchewan protocol is cost effective compared to the Calgary protocol (i.e. within HTS comparison) because the Saskatchewan protocol saves more money for a unit of effectiveness lost. **CONCLUSIONS:** The existing evidence suggest that compared to LTS, HTS is more costly but also more effective. While replacing eligible LTS procedures with HTS will result in costs decision makers will need to determine whether the amount of costs outweighs the amount of effectiveness gains.

PIH39

COST-EFFECTIVENESS ANALYSIS OF FLOSEAL (HAEMOSTATIC MATRIX) AS A HAEMOSTATIC AGENT IN OBSTETRIC HAEMORRHAGE IN MEXICO

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OBJECTIVES: To perform a complete economic evaluation of cost-effectiveness on the use of Floseal versus standard treatment for obstetric haemorrhage in Mexican patients from the Public Health Sector point of view **METHODS:** An economic analysis was designed using data base from the UMAE 23 Hospital of Gynecology and Obstetrics ¨Dr. Ignacio Morones Prieto¨, to compare Floseal and Control (standard treatment) in obstetric haemorrhage. The efficiency measure was the percentage of patients who avoided surgical re-intervention. Only costs from medical attention were used such as: haemostatic agents, hospitalization and surgery. An incremental cost-effectiveness analysis was performed, as well as a (deterministic and stochastic) sensitivity analysis, modifying cost and effectiveness of Floseal; and reinforced with the statistical analysis and lineal regression to determine de influence of several parameters on the total cost. **RESULTS:** The data base prove that Floseal is a more cost-effectiveness option than Control; 100% of patients avoided surgical re-intervention compared to 46.66% of the Control (p<.0001). Patients that used Floseal had less hospitalization time and less time in the intensive care unit with respect to patients with standard treatment. And, Floseal in obstetric haemorrhage had an average cost per patient of $137,505, while Control group was $237,470 generating savings of $99,965 per patient. The sensitivity analysis, statistical analysis and lineal regression analysis proved the strength of these results. **CONCLUSIONS:** The economic evaluation proved that Floseal is an cost-effectiveness and safe option with respect to Control, used in obstetric haemorrhage in Mexican patients, having a lesser cost while avoiding surgical re-interventions and hospitalization days.

PIH40

POTENTIAL COST-EFFECTIVENESS OF PRENATAL DISTRIBUTION OF MISOPROSTOL FOR PREVENTION OF POST PARTUM HEMORRHAGE IN UGANDA

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OBJECTIVES: Prenatal distribution of misoprostol has been advocated as a strategy to increase access to uterotonics during the third stage of labor to prevent Post Partum Hemorrhage (PPH). The objective of this study was to project the potential cost-effectiveness of this strategy in Uganda from both governmental (payer) and societal perspectives. **METHODS:** To compare prenatal misoprostol distribution to the status quo (no misoprostol distribution), we developed a decision model that tracked the delivery pathways, outcomes and cost of a pregnant woman from the prenatal period to onset of labor, delivery without complications or delivery with PPH, and successful treatment or death. Model parameters were derived from the Uganda Demographic and Health Survey and the published literature, as well as expert opinion. We computed expected probabilities of PPH and death due to PPH, Disability Adjusted Life Years (DALYs) and costs. In the incremental analysis, we calculated changes in expected probabilities of PPH and death due to PPH, Disability Adjusted Life Years (DALYs) and changes in costs. We conducted univariate and probabilistic sensitivity analyses to examine robustness of our results. **RESULTS:** In the base case analysis, the expected probabilities of PPH and death due to PPH were lower with prenatal misoprostol distribution (14.0% versus 16.3% and 1.4% versus 1.7% respectively). Mean DALYs were lower with prenatal misoprostol distribution (0.408 versus 0.511). Mean costs were lower with prenatal misoprostol distribution both from the governmental ($17.42 versus $18.27) and societal ($30.02 versus $31.55) perspectives. In the incremental analysis, prenatal misoprostol distribution was a dominant strategy i.e. it was both less costly and more effective. This result was robust to univariate and probabilistic sensitivity analysis. **CONCLUSIONS:** Prenatal distribution of misoprostol is potentially cost-effective in Uganda. It would potentially save lives and money and should be considered for national-level scale up for prevention of PPH.

PIH41

COST-EFFECTIVENESS OF QUADRIVALENT VERSUS TRIVALENT INFLUENZA VACCINES FOR CHILDREN

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OBJECTIVES: Influenza could cause serious consequences, especially on children. The WHO recommended that influenza vaccination of children is the most effective means. Trivalent influenza vaccine (TIV), which contains two lineages of influenza A virus and one lineage of influenza B virus, is now use as a first-line strategy to prevent influenza in Taiwan. However, when the influenza B-lineage included in the TIV mismatched with circulating strains, the protection of TIV would be reduced. Quadrivalent influenza vaccine (QIV) which includes both influenza B viruses of the two circulating lineages is thus proposed as an alternative. The aim of the study was to assess, from the governmental perspective, the cost-effectiveness of using QIV versus TIV as an influenza vaccination for children under 17 years old. **METHODS:** A Markov model was used to assess the cost and effectiveness of QIV and TIV. Cost data were obtained from the National Health Insurance claims data. Vaccine efficacy and transition probability of different health states were based on previous studies. Outcomes included cases avoided, life-years gained, QALYs gained and the corresponding incremental cost-effectiveness ratios (ICERs). The discount rate of cost and effectiveness was set at 3.5% and the time horizon used in the model is 100 years. **RESULTS:** The avoided influenza-associated outcomes form QIV, compared to TIV, and throughout the estimate lifetime were as follows: 251,512 influenza cases avoided, 32,355 cases with influenza complications avoided, 254,855 outpatient visits avoided, 3,860 inpatients receiving treatment for complications avoided and 717 deaths avoided. The ICER of this alternative, compared with TIV, was US$44,231.3 per QALY gained. When the herd effect was taken into consideration, the ICER dropped to US$30,947.85 per QALY gained. **CONCLUSIONS:** From the governmental perspective, the QIV of seasonal influenza is associated with favorable cost-effectiveness ratios in children under 17 years.

PIH42

A COST MINIMISATION ANALYSIS OF GONADOTROPINS FOR IN VITRO FERTILIZATION OVARIAN STIMULATION ON PREGNANCY- AND LIVE BIRTH-BASED ENDPOINTS IN GERMANY

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OBJECTIVES: The purpose of this analysis was to quantify the cost-effectiveness of recombinant follitropin alfa (r-hFSH) and highly purified urinary follicle stimulating hormone (uFSH-HP) in the *in-vitro* fertilization (IVF) process. **METHODS:** An Excel-based model estimated the drug cost per pregnancy and drug cost per live birth resulting from a hypothetical cohort of 1000 women undergoing IVF in Germany. Model inputs were taken from peer-reviewed published literature, and used to estimate the number of embryos generated per IU of gonadotropin used for ovarian stimulation. The cohort then underwent multiple rounds of embryo transfers (ETs) until embryo exhaustion or pregnancy as dictated by literature values. The obtained pregnancy rates were multiplied by the percentage of live births achieved per pregnancy according to the 2012 German IVF Registry to generate the live birth analysis. The cost inputs for r-hFSH and for uFSH-HP were ex-factory prices provided by Merck Serono affiliates in Germany. Cost inputs were limited to the cost of drug, as medical costs associated with the IVF procedure were assumed to be equal for both r-hFSH and uFSH-HP, and would not affect the comparison. All of the model outputs were age-agnostic and did not take into consideration procedural differences amongst fertility clinics, as the referenced clinical studies did not provide these details. **RESULTS:** Treatment with r-hFSH resulted in a cost per pregnancy of 173€ (235USD, 10%) (Bergh et al.) and 47€ (64USD, 2%) (Frydman et al.) less than treatment with uFSH-HP. The cost per live birth was 622€ (846USD, 15%) (Bergh et al.) and 312€ (424USD, 6%) (Frydman et al.) less with r-hFSH than for uFSH-HP. **CONCLUSIONS:** r-hFSH minimises the cost per pregnancy and cost per live birth in Germany. The results of the model demonstrate that r-hFSH represents a cost-effective gonadotropin to use for IVF ovarian stimulation.

PIH43

A COST-MINIMIZATION ANALYSIS OF CARBETOCIN FOR THE PREVENTION OF POSTPARTUM HEMORRHAGE IN CANADA

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OBJECTIVES: The objective of this analysis is to demonstrate the economic value of Duratocin® in the prevention of postpartum hemorrhage from uterine atony during active management of the third stage of labour in elective caesarean section delivery. **METHODS:** We analyzed the economic value of Duratocin® (carbetocin) in relation to the comparators most commonly encountered in clinical practice, and recommended in the clinical practice guidelines of the Society of Obstetricians and Gynecologists of Canada. We modeled the treatment pathways as described in the guidelines, and also the use of uterotonics encountered in typical Canadian practice, i.e. as a second-line intervention. Assuming that the ultimate incidence of postpartum hemorrhage is equal between all treatment strategies, we constructed cost-minimization models in TreeAge Pro (2013), with a time horizon of 8 hours. Transition probabilities were derived from the literature, and costs and resource consumption data were obtained from hospital databases and input from health care professionals. **RESULTS:** Duratocin® was shown to be the lowest cost treatment strategy in the prevention of postpartum hemorrhage in elective caesarean section delivery using either guidelines or typical-use treatment pathways. The total expected cost of the carbetocin treatment strategy under the SOGC Guidelines scenario is $22.12, vs. $24.91 for the oxytocin strategy. In the typical use scenario the results are even clearer, with carbetocin providing very substantial cost-savings compared to ergonovine or carboprost. **CONCLUSIONS:** These results were robust to all sensitivity analyses in the case of the typical-use scenario. In the SOGC Guidelines scenario the results were robust to all sensitivity analyses except the dosing of ergonovine.

PIH44

A COST MINIMISATION ANALYSIS OF GONADOTROPINS FOR IN VITRO FERTILIZATION OVARIAN STIMULATION ON OOCYTE- AND EMBRYO-BASED ENDPOINTS

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OBJECTIVES: The purpose of this analysis was to quantify the cost-effectiveness of recombinant follitropin alfa (r-hFSH) and highly purified human menopausal gonadotropin (HP-hMG) in the *in-vitro* fertilization (IVF) process. **METHODS:** An Excel-based model was constructed to estimate the cost per oocyte retrieved, cost per embryo generated, and cost per optimal chance of live birth for r-hFSH and HP-hMG in Sweden.